

DR750 thru DR7510

6 Amp Rectifier 50 - 1000 Volts

Features

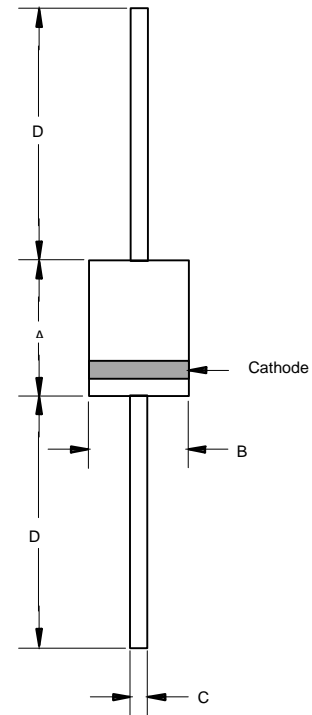
- Low Cost
- High Current Capability
- High Surge Current Capability
- Low Leakage

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 10°C/W Junction To Ambient

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DR750	DR750	50V	35V	50V
DR751	DR751	100V	70V	100V
DR752	DR752	200V	140V	200V
DR754	DR754	400V	280V	400V
DR756	DR756	600V	420V	600V
DR758	DR758	800V	560V	800V
DR7510	DR7510	1000V	700V	1000V

R-6



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

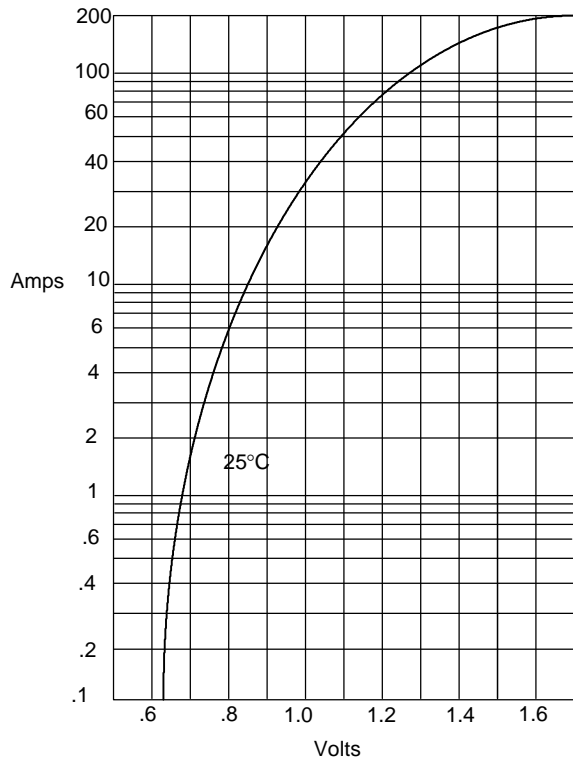
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6.0A	$T_A = 60^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	0.95V	$I_{FM} = 6.0\text{A}; T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 1mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	300pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

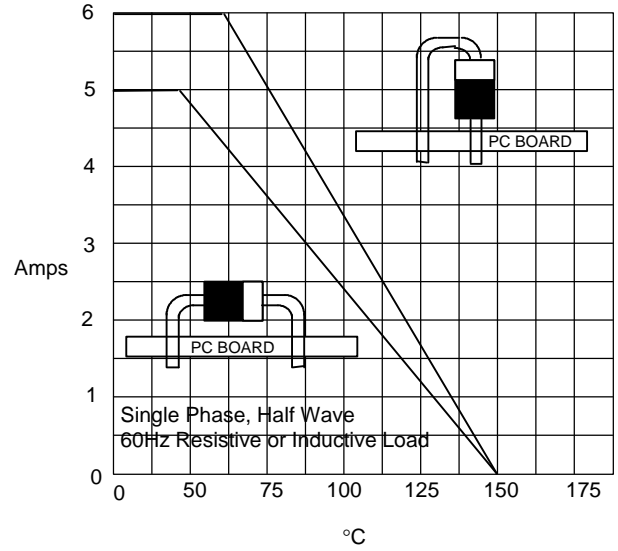
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Figure 1
Typical Forward Characteristics



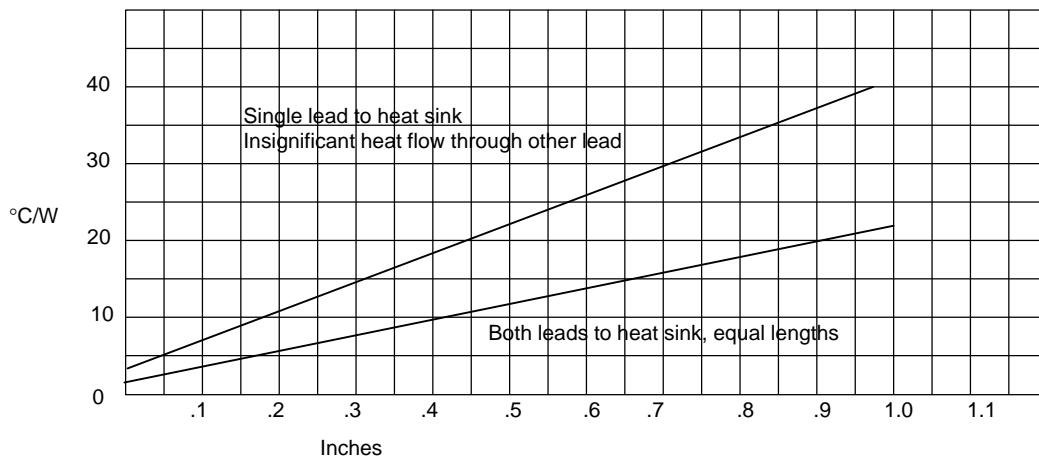
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

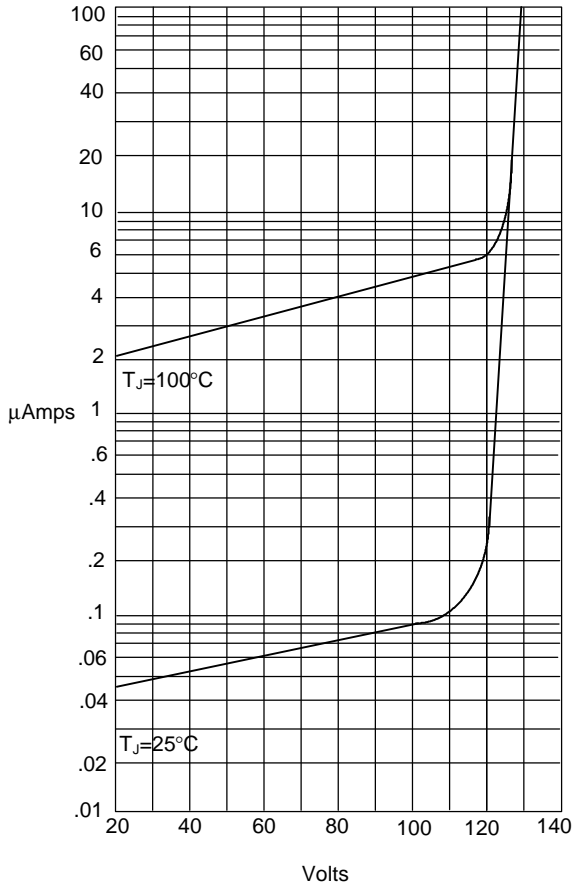
Figure 3
Typical Thermal Resistance versus Lead Length



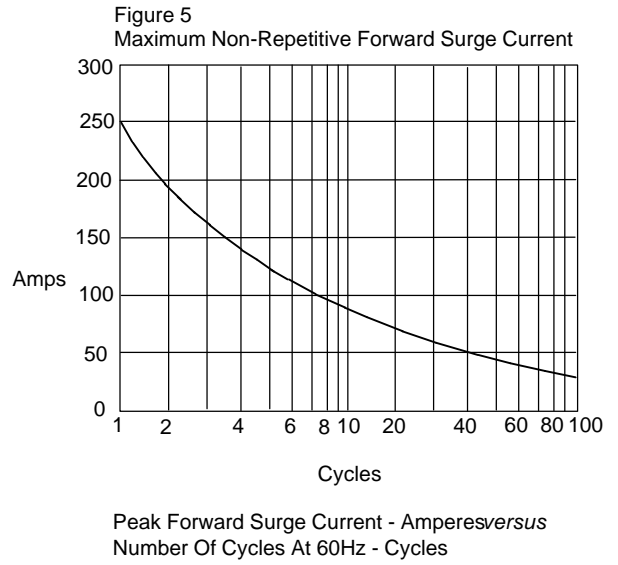
Thermal Resistance - °C/W *versus*
Equal Lead Length To Heat Sink - Inches

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Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles